FOR PARTICIPANTS ONLY

DP/STR(2)/6
4 April 1979

ORIGINAL: ENGLISH

ECONOMIC AND SOCIAL COMMISSION FOR ASIA AND THE PACIFIC

Second Meeting of the South-east and East Asia Group of Consultants in connexion with the implementation of ESCAP Resolution 180 (XXXIV): Strategies for the 1980s

16-21 April 1979
Bangkok

# POPULATION AND DEVELOPMENT IN SOUTHEAST ASIA AND THE FAR EAST: STRATEGIES FOR THE 1980S*

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# POPULATION AND DEVELOPMENT IN SOUTHEAST ASIA AND THE FAR EAST: STRATEGIES FOR THE 1980s

by

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## ABSTRACT

In spite of the differences in culture and socio-economic development among the countries in the sub-region comprising of the ASEAN countries, Hongkong and South Korea, one finds a set of common concerns of major importance arising from their demographic development in the past decades. These concerns include (a) the increase pressure on the attainment of development objectives specifically in the provision of basic services such as health, education, nutrition and others arising from continued rapid population growth; (b) the increased pressure on the creation of productive employment opportunities arising from the rapid growth of the labor force; and (c) the increased pressure on the provision of adequate social services and employment arising from the rapid migration into urban centers, especially in the primate cities.

Although the past strategies were mainly focused on population growth reduction through fertility control, many of the countries in the sub-region have began to develop broader population policies to deal with other demographic-related problems such as the imbalanced

population distribution and the rapid rural-urban migration. In addition, the shift in development strategy in the 1970s from the emphasis on rapid growth to the more equitable distribution of the fruits of development led to the formulation of specific policy measures emphasizing modernization of agriculture, regional and rural development, wider provision of employment opportunities and greater access of social and welfare services especially in the rural areas where the bulk of the population is found.

While this overall development strategy as developed in the latter part of the decade contained many elements that needed to be strengthened in the 1980s, several directions must be considered and taken into account in order to enhance the effectiveness of this strategy in achieving the development goals of the 1980s. One such direction is the need for greater integration of the different policy components in the overall strategy. Specifically this involves the integration of the demographic, manpower and welfare policy components by explicitly taking into account the interrelationships within and between such components. Introduction of quantitative targets would further enhance such integration at the operational level.

In addition opportunities exist for broadening policy components to include influencing strategic variables that could have substantial impact in achieving sectoral objectives. One of this is a policy to influence the age at marriage, while the other is a policy to influence age-sex specific activity rates.

Furthermore, there is a need to redirect emphasis on the importance of various programs to meet policy objectives. In this regard, family planning programs will need even greater emphasis in the 1980s than would some of the supportive measures that have been implemented or proposed to encourage fertility reduction (e.g., fiscal incentives).. Greater emphasis should likewise be place on programs to reduce mortality by reducing the still high infant and child mortality in some major countries and by reducing mortality differentials in these countries.

Finally, strong support should be given to the regular and timely collection and analysis of basic demographic and economic data needed for assessing problems as well as in formulating policies and programs in the 1980s and beyond.

## I. INTRODUCTION

This paper examines the nature and dimension of major population problems common in the sub-group of countries which include the ASEAN, Hongkong and the Republic of Korea. The aim of such examination is to identify appropriate strategies for dealing with these problems in the Third Development Decade (1980-1990). These strategies are viewed as integral components within an overall development strategy aimed at achieving rapid economic growth, higher rate of productive employment and a more egalitarian distribution of the benefits of development for the people in the sub-region.

The subsequent sections of this paper are organized as follows. The first section presents a demographic profile of the sub-region. The second section attempts to identify from a sub-regional standpoint important problems related to the sub-region's past and expected demographic developments, illustrates the nature and dimensions of these problems and reviews past strategies adopted to deal with these problems. On the basis of the findings of this section, the third section will examine the basis for alternative strategies for the 1980s

and identifies the main elements of these strategies. The last section summarizes the discussion in the preceding sections.

## II. A DEMOGRAPHIC PROFILE OF THE SUB-REGION

The region of Southeast Asia and the Far East which is the subject of this paper is comprised of Hongkong, the Republic of Korea, and the ASEAN countries of Indonesia, Malaysia, the Philippines, Singapore and Thailand. This sub-region within the ESCAP region had a total population of 276.4 million in 1976, constituting more than 10 percent of the total population in the ESCAP region and close to 7.0 percent of the world's population in the same period. By the middle of 1980s, it is projected that the population of this sub-region will grow to 336.3 million, representing an average annual growth rate of 2.2 percent. This rate, although slightly lower than that projected for the less developed countries as a whole of around 2.4 percent, is close to three times the annual growth projected for the more developed countries for the same period. This sub-region represents a relatively poor region by world standards as roughly indexed by per capita gross domestic product of $305 in 1974 compared to $390 average for the less developed world, and $4,920 for the more developed world.

Behind these broad aggregates, however, one finds in the sub-region a varied group of countries in terms of population characteristics, level of economic development and socio-economic structures.

Table 1 presents a summary of available social, economic and demographic indicators for each country in the sub-region. Although the data come from varied sources of different quality making international comparisons difficult, the following observations can be made.

Population size varied from 2.3 to 4.5 million in the island states of Singapore and Hongkong to 135 million in Indonesia. Inversely, per capita gross domestic product ranged from as high as $1,566 to $2,324 in Hongkong and Singapore respectively to as low as $127 in Indonesia. The Philippines and Thailand occupied intermediate positions with respect to both indicators with population sizes of around 43 million in 1976 and with per capita gross domestic products of $323 and $355 respectively in 1974.

International migration as a component of population growth has been insignificant in such countries as Thailand, Indonesia, Malaysia and the Philippines after the Second World War and in Korea since 1955. Hence the rates of natural increase virtually account for the currently observed population growth rates in these countries. While the annual rates of natural increase for the more developed countries in the sub-region ranged from 1.3 percent in Hongkong to 1.7 in South Korea in the mid-seventies, the rates of natural increase still continued to be high in Indonesia, Malaysia, the Philippines and Thailand, ranging from 2.[illegible] percent per annum in Peninsular Malaysia to 2.8 percent per annum in Thailand.

Table 1

SELECTED DEMOGRAPHIC, SOCIAL AND ECONOMIC CHARACTERISTICS

| Indicator | Hongkong | Indonesia | Republic of Korea | Malaysia, Peninsular | Philippines | Singapore | Thailand |
|---|---|---|---|---|---|---|---|
| 1. Population (in millions) | | | | | | | |
| 1976 (est) | 4.5 | 135 | 35.8 | 10.9 | 43.3 | 2.3 | 42.9 |
| 1985 (proj) | 5.4 | 165 | 43.7 | 14.2 | 53.3 | 2.6 | 52.1 |
| 2000 (proj) | 5.8 | 220 | 53.5 | 19.8 | 85.2 | 3.1 | 72.2 |
| 2. Density, 1976 population/sq. km | 3,808 | 89 | 358 | 70 | 144 | 3,784 | 84 |
| 3. % urban of total population | | | | | | | |
| 1976 (est) | 95 | 19 | 48 | 29 | 35 | 90 | 20 |
| 1985 (proj) | 97 | 24 | 58 | u | 40 | 95 | 21 |
| 4. % distribution of population by age, 1976 (est) | | | | | | | |
| all ages | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| 0 - 4 | 9 | 16 | 13 | 15 | 16 | 10 | 16 |
| 5 - 14 | 21 | 28 | 25 | 27 | 27 | 22 | 27 |
| 15 - 64 | 64 | 53 | 58 | 54 | 54 | 64 | 53 |
| 65 and over | 6 | 3 | 4 | 4 | 3 | 4 | 4 |
| 5. Dependency Ratio | 56 | 89 | 73 | 84 | 86 | 56 | 88 |
| 6. Estimated rate per 1000 population | (1976) | (1975) | (1975) | (1975) | (1975) | (1976) | (1975) |
| Births | 17.7 | 37-40 | 24 | 30.3 | 37 | 18.8 | 37 |
| Deaths | 5.1 | 15-18 | 7 | 6.3 | 11 | 5.1 | 8.9 |
| Natural Increase | 12.6 | 20-25 | 17 | 24.0 | 26 | 13.7 | 28.1 |
| 7. Life expectancy at birth (years) | (1976) | (1973) | (1973) | (1974) | (1975) | (1970-75) | (1974-75) |
| Male | 68.0 | 46.4 | 63 | 65 | 58 | 67.4 | 57.6 |
| Female | 75.6 | 48.7 | 67 | 70.3 | 61 | 71.8 | 63.6 |

Table 1 (cont'd.)

| Indicator | Hongkong | Indonesia | Republic of Korea | Malaysia, Peninsular | Philippines | Singapore | Thailand |
|---|---|---|---|---|---|---|---|
| 8. Infant mortality rate, 1970 | 20 | 140 | 60 | 41 | 82 | 21 | 80 |
| 9. % literate (year) | (1971) | (1971) | (1970) | (1970) | (1970) | (1976) | (1970) |
| Male | 92 | 71 | 94 | 90 | 77 | 87 | 89 |
| Female | 63 | 49 | 84 | 62 | 76 | 67 | 75 |
| (Age group) | (10+) | (10+) | (6+) | (10+) | (6+) | (10+) | (10+) |
| 10. Gross domestic Product (GDP) Per Capita in US$ | 1,566 | 127 | 504 | 602 | 359 | 2,389 | 323 |
| (Year) | (1974) | (1973) | (1974) | (1973) | (1974) | (1974) | (1974) |
| % derived from agriculture | 2 | 33 | 25 | 28 | 28 | 2 | 31 |
| (Year) | (1973) | (1975) | (1975) | (1971) | (1975) | (1974) | (1975) |
| 11. Annual % increase in real GDP 1970-74 | | | | | | | |
| Total | 6.5 | 7.3 | 10.9 | 8.2 | 6.3 | 10.2 | 6.3 |
| Per Capita | 4.7 | 4.3 | 9.1 | 5.1 | 3.3 | 9.3 | 3.4 |

Source: From various United Nations publications and other sources as compiled by Dorothy L. Nortman and Ellen Hofstatter, Population and Family Planning Programs. Ninth Edition. The Population Council, New York, 1978. Table 3.

With the notable exception of Singapore, the relatively high rates of natural increase in the ASEAN countries reflect the continued high rate of fertility in the face of low and declining mortality. The estimated crude birth rates ranged from 37-40 per 1000 persons in Indonesia, about 37 per 1000 persons in Thailand and the Philippines, and about 30 per 1000 in Peninsular Malaysia. In contrast, the estimated crude birth rates for Hongkong and Singapore are from 18 to 19 per 1000 persons while that for Korea is 24 per 1000 persons. The low fertility in these latter countries represents the culmination of rapid fertility declines started in the 1960s and continuing in the 1970s.

Evidence of fertility declines, however, have began to be noted in the high fertility countries of ASEAN and the moderate gains in fertility reduction are expected to accelerate in the next decade. Percent declines in crude birth rates during the period 1965 to 1975 were reported to be from 13 percent for Indonesia, 19 percent for the Philippines, 23 percent for Thailand and 26 percent for Malaysia. (Mauldin, 1978). Declines in fertility in these countries have been variously attributed to changes in nuptiality patterns and in marital fertility in response to the inter-play of socio-economic development and of the fertility control programs instituted in the late sixties and early 1970s. Based on the experience of the earlier and the more rapid declines in fertility noted in Singapore, Hongkong and South

Korea, optimistic expectations of fertility reduction in the 1980s and beyond in the less developed countries of this sub-region will be contingent on rapid socio-economic transformation in these countries. Given the age structure, significant changes in nuptiality and marital fertility generated by economic development must occur for fertility to decline substantially in the 1980s and beyond.

The effect on the growth rate of fertility declines expected in the 1980s, however will be modified by the expected improvement in mortality. While crude death rates have reached as low as 5.1 per 1000 persons in Hongkong and Singapore, the crude death rates in the mid-1970s are still between 9-11 per 1000 persons in the Thailand and the Philippines and as high as from 15-18 per 1000 persons in Indonesia. Further reduction in mortality especially in infant and child mortality expected in these countries in the 1980s, would tend to offset the negative effect of declines in fertility on the overall rate of population growth.

The high fertility and growth rates experienced in the past decades have led to a relatively young age structure observed in the mid-1970s in Indonesia, Malaysia, the Philippines, the Republic of Korea and Thailand. The proportion of population aged 15 or less years in 1976 were from 42-44 percent in these countries compared to 30-32 in Hongkong and Singapore. The corresponding percentage for the more developed countries of the world is around 25.0 percent while for the

less developed world, around 40 percent. The resulting young age structure is reflected in a high dependency ratio of from 84-89 in the four ASEAN countries compared to only 58 in Hongkong and Singapore.

The high fertility and growth rates experienced in the 1950s and 1960s are now reflected in higher rates of growth of the labor force in many of these countries. The size of the new entrants to the labor force often tended to be greater than the capacity of the economy to absorb into productive employment, resulting in greater unemployment and underemployment. In addition, the lack of emphasis given to the development of the rural agricultural sector in the growth strategies of the 1950s and 1960s have contributed to the rapid rural-urban migration especially to the primate cities in Indonesia, Thailand and the Philippines, seriously affecting both the employment situation and the supply of social services in the cities.

## III. POPULATION CONCERNS AND POLICY IN PERSPECTIVE

### 1. Introduction

The rapid growth of population resulting mainly from the rapid declines in mortality after the Second World War generated widespread and increasing concern among developing countries since the 1960s of the effects such growth would have on the attainment of their respective development goals. These concerns were articulated in various national

seminars and workshops as well as in regional and international forums, and more formally in individual countries' development plans. Region-specific concerns were expressed in the Second Asian Population Conference held in Tokyo in 1972. Problems identified, arising partly from population trends, include such problems as the volume of unemployment and underemployment, the lag in the provision of education and health services, environmental deterioration, and the widening of the gap between rich and poor. A "Declaration of Population Strategy for Development", was adopted which emphasized that the population problem is part of a complex of economic and social problems requiring a wide range of policies.

In the World Population Conference held in Bucharest in 1974, international concern was expressed that the imbalance between the trends of population growth, distribution and structure, on the one hand, and the social, economic and environmental factors on the other create additional difficulties for the achievement of sustained development. A "World Plan of Action" was adopted which offered recommendations for obtaining a more balanced demographic and socio-economic development.

The population concern of the individual countries in the sub-region were formally expressed in their respective development plans in the 1960s and 1970s. In addition to the over-riding concern for the effect of rapid population growth on their respective develop-

ment goals, other population-related problems were stressed reflecting country-specific socio-economic and demographic circumstances. This section first reviews the population concerns of each individual country in the sub-region as formally expressed in their development plans in order to identify the common problems from a sub-regional viewpoint. The nature and magnitude of the problems as commonly perceived by these countries will then be illustrated by examining readily available secondary data for the Philippines, Indonesia and Thailand. The population in these three countries constitutes 80 percent of the total population of the sub-region. Special attention will be paid to the demographic forces that contributed to the emergence of the problems. The later part of this section will review the policies and programs adopted by this sub-group of countries in dealing with this commonly perceived problems.

## 2. Country-Specific Concerns

Indonesia considers as serious long term problems its high population growth rate and the imbalance in the distribution of its population. This view is expressed both in its First Five Year Plan 1969/70-1973/74 and in its Second Five Year Plan 1974/75-1978/79. The high population growth rate, caused mainly by the continuing high birth rate and the decrease in the mortality rate, resulted in a young age structure, and in the rapid growth of its labor force. The rapid

increase in population is viewed as creating additional pressure on the supply of food, education facilities and other social services and as hampering capital formation necessary for the creation of employment opportunities of its rapidly increasing labor force, especially the young and new entrants to the labor force.

A unique feature of Indonesia population distribution is the heavy concentration of the population in Java. In 1971, 64 percent in the total population of Indonesia are found on the island of Java which occupies only 7 percent of the total land area. Hence the imbalanced distribution of the population and labor force between Java and the other regions, is viewed as presenting difficulties in the maximum use of its natural resources and its labor force. The imbalances in the distribution of the labor force in particular has been considered to bring about labor surpluses and underemployment in Java while creating labor shortages in the other regions.

Another aspect of the population distribution problem of Indonesia has been the rapid flow of population from the village areas to the cities, resulting in the increased pressure to provide urban employment and social services, as well as in deterioration of the urban environment.

In the First Malaysian Plan (1966-1970) concern was expressed that the country's three percent population growth is cancelling the

benefits of increases in income and living standards. In the Second Malaysian Plan (1971-1975) attention was given to the relationship between rapid population growth and unemployment. It was viewed that the high rates of population growth are expected to continue into the latter years of the 1970s, while the impact of the family planning program will be felt only in the next decade. Hence the task of keeping up with a rapidly increasing labor force was expected to place a heavy burden on the economy. In the Third Malaysian Plan 1976-1980, mention was made of the result of past demographic trends on the age-dependency ratio, implying a substantial demand for the basic necessities of life as well as services such as education, health and housing. Furthermore the past demographic trends was shown to have led to the rapid growth of thelabor force as persons born in the 1950s enter into then prime worker ages. In the case of males, this has completely outweighed the tendency for participation rates to decline between the ages 15-19 due to prolonged schooling and earlier retirements, respectively. The increase in participation rates in the early working years of females further accelerated the pace of labor force growth. All these factors taken together were viewed to have made heavy demands on the economy to create a sufficient number of productive job opportunities.

The population concerns expressed in the Second and Third Malaysian Plans, however, should be viewed within the larger context of Malaysia's racial composition. Besides the inadequacy of basic

needs of the poor and the problems of unemployment and underemployment, the major problems related to its population composition as expressed in its New Economic Policy of 1970 were the high income and wealth inequality within and between racial groups; and the unequal distribution in employment of the major racial groups among the various sectors of the economy.

In the Philippines the population concern in the 1970s centered around the country's rapid population growth. This rapid growth is viewed as generating heavy dependency burden which places considerable pressure on food and nutritional adequacy, educational, health, and social services, housing, and agricultural systems. Furthermore the past high rates of population growth in the 1950s and the 1960s are now being translated into more rapid increases in the labor force, adding to the burden of providing productive employment for all.

In the latest development plan, (1978-1982) these problems were viewed at both the national and regional levels. In addition, concern was expressed in this plan with respect to the rapid growth of the urban population. Such phenomenon expected in the next decade is viewed to add to the difficulties of providing adequate services to the urban centers.

During the first half of the present century, Thailand's official stance on population was predominantly pronatalist. However

in the 1960s, a series of national population seminars and committees warned of the dangers of rapid population growth, culminating in 1970 in the adoption of a population policy to support voluntary family planning in order to resolve various problems concerned with the very high rate of population growth, which was then viewed as constituting an important obstacle to the economic and social development of the nation.

The Third Plan (1972-1976) recognized that the country's high birth rate presents a heavy burden on the country's development efforts by increasing financial burden for the provision of education, public utilities, and public health. Furthermore, rapid growth affects the standard of living of the poor, affects the quality of manpower, increases unemployment, reduces the average farm size and therefore impedes agricultural development, and aggravates housing conditions and public health problems.

In the Fourth Plan, (1977-1981) it was viewed that while the population growth rate reduction target of the Third Plan was substantially achieved i.e., a reduction from 3.0 percent to 2.6 by 1976, the continued rapid growth of the labor force still constitutes a main problem in upgrading labor quality and providing productive employment. In addition, increased rural-urban migration, especially the large migration to the primate city of Bangkok has resulted in more congestion and environmental and social deterioration.

In Korea when the First Five Year Economic Development Plan (1962-66) was formulated at 1962, it asserted that a measure to control population will be needed because of the rapidly increasing rate of population growth, approximately 3 percent in 1960 due to improved health conditions. The Second Five Year Plan (1967-71) stated that the excessive growth of the population has been detrimental to economic development and per capita income growth, and proposed a family planning program to be linked with maternal and child health care programs.

By 1970, annual rate of population has declined to 1.8 percent from 2.5 percent in 1966 and from 3.0 percent in 1960. The decline was attributed to a rise in income level, rapid urbanization, higher education, and particularly family planning programs carried out since 1962.

With this background, the Fourth Five Year Economic Development Plan 1977-1981 discussed several population problems. First, while the population growth rate has continuously declined in the recent decade, the traditional preference for sons still persists. The use of contraceptives is still limited, and the average age for a first marriage has steadily decreased. Most critical is the fact that the number of females in the childbearing age is expected to increase in the latter part of the 1970s as a result of the 1950s baby boom. Hence, the plan suggests the need for continued strong birth control measures. In addition emigration will be encouraged to reduce the population growth rate.

Secondly, labor force is expected to increase over the planning period, due to the rapid population growth in the past, at the same time the rate of labor force participation is expected to rise simultaneously with the change on social structure. This economic and demographic change is expected to pose enormous challenge for providing full employment for the increased labor force.

Finally, migration from rural to urban sectors has yet to decline significantly leading to several socio-economic problems in metropolitan areas.

Although both the city states of Singapore and Hongkong have successfully decreased its growth rate through reduction in fertility over the past two decades, the increase in the number of the population is a matter of concern in view of its effect on the provision of services, especially housing. The Singapore government has very explicit goals of achieving replacement reproduction by 1980 and to reach zero population growth by 2030. In Hongkong, population is expected to increase in absolute numbers from 4.8 million in 1981 to nearly 6 million in 1991, and in a small high density area like Hongkong, this increase is viewed to have important implications for the provision of education, medical and health services, housing, social welfare and employment.

On the basis of the above description, the problems of major importance and common to the majority of the countries in the sub-region

arising from their demographic development in the past decades include (a) the increased pressure on the attainment of development objectives specifically in the provision of basic services such as health, education, housing and others arising from rapid population growth (b) the increased pressure on the creation of productive employment opportunities arising from the rapid growth of the labor force and (c) the increased pressure on the provision of adequate social services and employment arising from the rapid growth of urban centers, especially in the primate cities.

The next sub-section will examine the demographic developments in Indonesia, Thailand and the Philippines in an attempt to provide a perspective on the nature and magnitude of the interrelated problems.

## 3. Philippines

Population Trends. In May 1975, the Philippine population was reported at 42 million which is more than five times the 1903 population level. Historically, the Philippine population exhibited fast rates of growth, growing on the average from around 2.0 percent per annum during the 1903-1948 period to as high as 3 percent per annum during the subsequent decades of the 1950s and 1960s. Between 1970 and 1975, the intercensal growth rate declined to 2.78 percent per year.

Available estimates of mortality indicate a decline in crude death rates from 27 per 1000 persons in the 1904-1905 period to about 23 in the 1936-1941 period. Mortality further declined to a level of 15 per 1000 persons in 1956-1960 (Review of the Philippine Population Program, 1978, p. 150, Table 2). By 1970-1975, the rates were estimated at around 10 per thousand persons. In 1975, it was placed at around 9 per 1000 persons.

In contrast, estimates of crude birth rates were in excess of 50 per thousand during the 1903-1984 period, remained in the high at from 47-51 in the 1948-1960 period and declined to the 42 to 45 in the 1960-1965 period, and finally to 37 to 40 in the 1970-1975 period. (Review of the Philippine Population Program, 1978, p. 152, Table 4). In 1975 the crude birth rate was placed at around 36 per 1000 persons.

Consequently the current anuual population growth rate is estimated to be at least 2.5 percent, implying a doubling of population in less than 28 years, or a net growth of 1.1 million persons per annum if applied to the 1975 census population.

Despite declines in the crude birth rate, total marital fertility is still extremely high and have remained virtually constant at the national level for the five year periods 1958-1962 to 1968-1972. The total marital fertility rate was 9.56 in the first period and 9.63 in the latter priod. (Concepcion and Smith, 1977). However, fertility

control in selected sectors of the population is evidenced by a clear differential in total marital fertility between women in metropolitan areas, women in other urban areas and women in rural areas. (Concepcion and Smith, 1977).

In contrast to the steady or rising marital fertility in all but a few isolated sectors of the population, total fertility rates for all women have declined at the national level in the recent past: from 6.5 to 6.3 to 5.9 over the three year periods 1958-1962, 1963-1967 and 1968-1972, reflecting the effect of widespread delay in marriage rather than fertility control within marriage. (Concepcion and Smith, 1977).

A seventy-year trend in nuptiality reveals a substantial shift, involving an upward trend in percentages of both sexes who were single in the age groups 15-19 and 20-24, beginning as early as the prewar period, and an acceleration of the trend for both sexes in the period since 1960. The singulate mean age at marriage rose from 20.9 in 1903 to 22.1 in 1948, and to 22.8 in 1970. (Concepcion and Smith, 1977). Available evidence on the source of change in marriage patterns have been traced among others "to several interrelated processes of modernization including urbanization, educational expansion and the shifting social composition of the labor force". (Smith, 1976).

Thus based on the above evidence, the continued rapid rate of growth of the Philippine population is due to the rapid decline in

mortality after the Second World War and the continued high rate of fertility. Although fertility has declined moderately after 1960, the decline was due more to increased age at marriage than to declines in marital fertility at the national level. Declines in marital fertility after 1972 may be expected however, due to the effect of family planning programs instituted since 1971. The results of demographic surveys conducted during the mid-1970s in the Philippines now undergoing analysis should provide information on the magnitude of these probable fertility declines.

In the absence of large net migration, the age structure of the Philippine population was determined by past fertility and mortality trends. Over time the Philippine population showed an increasing proportion enumerated under age 15 with a consequent reduction in the working age population 15 to 64 years. It was only in the 70s that the trend seemed to have reversed. Between 1970 and 1975 the proportion age 0-14 were respectively 46 and 44 percent, while the proportion age 15-64 were 51 and 53 percent, respectively. The increase in the proportion in the ages 15-64 meant an increase in working age groups by 3.3 million or an average of 660,000 persons per annum between 1970 and 1975. The increase during the decade 1960-1970 was 4.8 million of 480,000 persons per annum. Thus in terms of sheer size, additions to working age populations, have important implications for current employment absorption.

The Employment Situation. Available labor force data since 1956 show that the labor force has grown from about 9.0 million in 1956 to 14.7 million in 1974, for an average annual increase of 2.7 percent. Employment on the other hand grew from 8.0 million to 14.2 million during the same period for an average annual increase of around 3.2 percent. In 1974, about 50 percent of the household population (10 years and over) were in the labor force, about 70 percent of which males and 33 percent were females. Labor force participation for both sexes declined from 61 percent in 1956 to 51 percent in 1974. The decline was due largely to the decline in the labor force participation rate of the 10-24 age group. Their participation rate was 51 percent in 1956 while it was 37 percent in 1974; such decline being attributed largely to increased school participation.

Indicators of unemployment and underemployment for the period 1956-1974 reveal that unemployment averaged around 7 percent in terms of numbers or 10 percent in terms of full-time equivalent, that is in terms of the unemployed plus the full-time equivalent unemployment of the visibly underemployed using a 40-hour work week standard. Majority of the unemployed consisted of young workers 10-24 years old and those living in urban areas. On the other hand, underemployment averaged 1.9 million, close to half of whom were already working full-time (40 hours or more per week).

In 1976 unemployment was posted at 5.2 percent, while visible

underemployment numbering 770,000 was 5.3 percent of the total employed. Hence total underemployment reached 1.6 million. Furthermore, in 1974, about 73 percent of total employed were either self-employed or unpaid family workers, reflecting to some extent the lack of alternative job opportunities. Hence problems of labor under-utilization and poor access to relatively better income earning opportunities characterize the employment picture.

The magnitude of the problem from the supply side is not about to be abated in the next decade. Labor force (15 years old and over) is projected in the plan period 1977-1987 to increase from 16 million in 1977, 19.1 million in 1982 and 22.5 million in 1987. As in the past, the agricultural sector which generated more than half of total employment, from 1956 to 1974 is expected to bear the larger burden of employment generation.

Population Distribution and Rural Urban Migration. Available data on population movements reveal that such movements overall have tended to lead to a more even distribution of the population across provinces. In 1903 nearly half of the population (46.4 percent) would have to be displaced across provincial borders in order to achieve an even distribution of land and people. By 1970, the percentage is reduced to 32 percent. (Concepcion and Smith, 1977). The principal mechanism by far in this redistribution has been the interregional

transfers by rural residents of oversettled areas to open frontiers in distant provinces. This type of movement accounted for 44 percent of all lifetime interregional migrants in 1970. Migration to the national metropolis is also significant: 10 percent of total interregional migrants moved to Manila and an additional one third moved into Metro Manila. The pattern of the broad interregional migration flows is often characterized by the earlier large frontier type movements involving mostly young and single males, and the later urban type movement involving mostly females. The pattern of recent migration from the 1960s however was far more complex involving a decline in the long distance, inter-regional transfers, an increase in the magnitude of counter streams, and a substantial rise in urbanward migration especially in the more heavily urbanized Luzon. (Concepcion and Smith, 1977).

In terms of the rural-urban population, the share of rural population decreased from 97 percent in 1903 to 67 percent in 1970. Meanwhile the share of the urban population increased from 13 percent in 1903 to 33 percent in 1970, much of the increase in urban population occuring since 1939. The percent urban is estimated at 35 percent in 1976.

In terms of growth rate, the rural population grew at an average annual rate of from 1.8 to 2.0 percent during 1903-1960 period, while it grew by 2.6 percent per annum in the decade 1960-1970. In contrast, the urban population grew at an annual average rate of 3.5

percent in 1903-1939 and thereafter grew at 4.1 percent in both periods 1939-1960 and 1960-1970. This meant a growth from 3.5 million in 1939 to 8.0 million in 1960 and 12 million in 1970. More than one quarter of this urban growth 28.4 percent in 1939-1960 and 26.3 in 1960-1970 was due to rural-urban migration, more than half in both periods to natural increase and between 13 to 18 percent due to reclassification of areas. (Concepcion and Smith, 1977).

4. Indonesia

Population Trends. The estimated population in 1976 was 135 million. Based on census data available for three periods, population grew from around 61 million in 1930, to 97 in 1961 and 119 in 1971. From a growth rate of 1.5 percent during the 1930-1961 period, population increased to 2.08 during the period 1961-1971 to around 2.5 percent during 1971-1976.

Estimates of crude death rates for Indonesia based on very scanty data from the population censuses of 1961 and 1971 show an average rate of 17 per thousand person during 1961-1971 period, with average life expectancy at birth of 47 years. Between Java and the Other Regions, mortality tended to be uniformly high, varying only from 15 per 1000 in urban Java to 18 per 1000 in rural Other Islands. Likewise life expectancy varied from 52 years in urban Java and 45 years rural Other Islands. (Lembaga Demografi, 1973).

Infant mortality tended to be high in Indonesia compared to the rest of the countries in the sub-region. It was estimated at 137 infant deaths per 1000 live births for the 1961-1971 period, varying from 110 in urban Java to 151 in rural Other Islands. (Lembaga Demografi, 1973). Available cause of death statistics confirm this high infant mortality by revealing that diseases peculiar to early infancy were consistently ranked first in contributing to total deaths during the periods 1956, 1960 and 1968. Among other major causes, however, there appears to have been substantial changes in mortality patterns. (McNicoll & Mamas, 1973).

Estimates of crude birth rates using backward projection techniques show an average crude birth rate of 44 per 1000 over the decade 1960-1970, ranging from 42 per 1000 person in Java to 48 per thousand in the Other Islands. Further disaggregation reveal rates ranging from 37 per 1000 in Yogyakarta to 49 per thousand in Sumatra. (Lembaga Demografi, 1973).

The total fertility rates obtained by application of the Cho own-children technique reveal an average for the 1966-1970 period of 5.5 births per woman for Indonesia as a whole, which is slightly lower than the 5.9 rate for the Philippines in the 1968-1972 period. Differentials in total fertility rates are found between rural and urban: 5.6 versus 5.0, and between Java and the Other Islands: 5.2 versus 5.9.

For Indonesia as a whole the mean age at marriage during the 1964-1969 period was 19.5 years, which is about 3 years lower than for the Philippines in 1970. The mean ages in Java and the Other Islands were 18.8 and 21.2 years, respectively. Some indication of a recent upward trend in age at marriage is provided by survey data on proportions never married, which increased in Java from 50 percent in 1963 for women ages 15-19 to 56 percent in 1971, while for women ages 20-24, the percentages increased from 11 percent to 15 percent. For the Other Islands, the percentages increased from 73 to 80 for ages 15-19 from 1961 to 1964, while for the ages 20-24, the percentages increased from 24 to 30 percent. (McNicoll and Mamas, 1973).

Evidence of fertility declines based upon preliminary estimates of the 1976 intercensal population survey for the two periods of 1967-1970 and 1971-1975 have been reported. (Suharto and Cho, 1978). For Indonesia as a whole, the total fertility rate declined by 7 percent, from 5.6 to 5.2. For Java and Bali the total fertility rate fell from 5.2 to 4.9, a decline of 6 percent. Fertility declines ranging between 6 and 14 percent were noted in the age groups 15-19, 25-29, 35-39 and 40-44 and a substantial decline (22 percent) in the age group 45-49. Little change however, was seen for the age group of 20-24 and 30-34 (1 and 4 percent respectively), the age groups which contributed 44 percent of total fertility in 1971-1975 period. Continuation of fertility decline in Indonesia will thus depend mainly on whether more

significant declines will occur at the main childbearing ages 20-34, which in turn will depend on further increases in the age at marriage and increasing fertility control within marriage.

The Employment Situation. Data on labor force in Indonesia based on the 1971 census reveal a total of 40 million in the labor force representing about half of the total population aged 10 years and over. The labor force participation for males was 69 percent while for females it was 32 percent, about the same rates obtaining in the Philippines in 1974. A sharp decline in the male participation rates was noted, from 80 percent in 1961 to 69 percent in 1971. Part of the decline in male participation rates however may be due to the shortening of the reference period from six months in 1961 to one week in 1971; the latter reference period tending to understate seasonal employment. (Lembaga Demografi, 1973). Female participation rates, however increased from 29 to 32 percent.

Data from the 1971 census showed a surprisingly low unemployment rate of 2.2 percent, representing almost 890,000 of the labor force of which about half were seeking work for the first time. Unemployment is slightly higher for males than females: 2.4 and 1.8 percent respectively, and higher in the urban than in the rural areas: 4.8 to 1.7 percent, respectively. However employed persons in the urban areas constitute about one seventh of employed persons in Indonesia.

Employment by status reveal that in 1971, 39 percent were workers on own account and 24 percent were unpaid family workers. If these types of workers largely represent the underemployed and the low income earners, then close to two thirds of the employed labor force may be underutilized. The picture appeared worse for females than for males: 69 and 60 percents respectively. Not surprisingly, close to 40 percent of the employed women were in the unpaid family worker category compared to only 16 percent for men. For both sexes, from 70 to 86 percent of own account and unpaid family workers were found in the agricultural sector. This sector accounted for the largest share of the employed labor force which was 63 percent in 1971, varying from 59 percent in Java and Madura to 75 percent in the Other Islands. Manufacturing, on the other hand, absorbed only less than 8 percent of th employed labor force.

The labor force of Indonesia, according to a low variant is projected to increase from 40 million in 1971 to 54 million in 1981, and then to 79 million in 1991. (Lembaga Demografi, 1973). This implies an average annual growth rates of 3 percent between 1971 and 1981, and 3.8 percent between 1981 and 1991. Thus the challenge of employment creation in the 1980s will tend to be much greater than in the present decade.

Regional and Rural-Urban Distribution. The highly uneven geographical distribution of the population in Indonesia is well known.

In 1971 almost two thirds of the population is concentrated on the relatively small island of Java, which comprises only less than 7 percent of the country's land area. The population density is 565 per square kilometer in Java compared to only 22 per square kilometer outside Java. These regional differences are often explained in terms of geography as well as historical chance and the impact of a static agricultural technology. (McNicoll and Mamas, 1973). The percentage of population by islands show a similar pattern during the whole period from 1920 to 1971. For example the percentage of Java's population to the total population was 71 percent in 1920 and 64 percent in 1971, implying that the interisland transfer of population from Java to the Other Islands have yet to have significant impact in redressing the imbalance of population distribution.

Data on migration from the Second National Sample survey of 1964-1965 revealed a remarkable stability of Indonesia's population. It was reported that fewer than 6 percent had moved from a different village or town within the previous 5 years, and in the rural areas fewer than 5 percent. The differences between Java and the Other Islands in this respect were only slight. (Lembaga Demografi, 1973). Of the total movements over the 1960-1964 period, 61 percent were internal migration in Java while 29 percent constituted internal migration in the Other Islands, and most of these were short distance migration.

Definitions of urban have not remained fixed, making inter-censal comparisons difficult. However, the proportion of population living in urban areas rose from 15.9 percent in 1961 to 17.5 percent in 1971. The percentages for 1926 and 1930, however were 5.7 and 7.2, respectively, reflecting that the rapid growth of urban population occurred during the 1930-1961 period, mostly after Independence. In terms of growth rate, the urban population grew by 2.9 percent annually between 1961 and 1971, and more than 4 percent between 1920 and 1961. The trend of the proportion of urban population in cities of 100,000 and over, increased from 2.7 percent in 1930 to 9.9 percent in 1961 and to 11.4 percent in 1971. In terms of growth rates of selected large cities, the three largest cities with populations of 1 million or more have grown from 2.1 percent in Bandung 2.5 percent in Semarang to 4.6 percent in Jakarta during the decade 1961-1971. All these cities are in Java. (McNicoll and Mamas, 1973).

The urban population in Indonesia defined as the population concentrated in towns or cities of 10,000 persons or more is projected to increase from its 1971 level of 22.3 percent of the total population to 27.6 percent or 41 million by 1981, and to 38 percent or 69.5 million by the 1991. (Lembaga Demografi, 1973). The average annual increase in urban population based on these projections is 4.4 percent for the period 1971-1981 and 5.3 percent for the period 1981-1991. A large part of the urban growth is assumed to result from a heavy flow of rural population into the cities and towns.

5. Thailand

Population Trends. In 1976, Thailand had an estimated population of 42.9 million, which is more than five times the 1911 population level. The Thai population grew at an increasing rate from 1.4 percent between 1911 and 1919, 2.2 percent in 1919-1929, and 3.0 percent during the 1929-1937 period, to 3.2 percent between 1947 and 1960. During the intercensal period 1960-1970, the growth rate decelerated to 3.0 percent, and in 1976 to 2.5 percent; the latter implying a doubling of population in 28 years. (ESCAP, 1976).

Available estimates of mortality indicate a decline in crude death rate from 31.3 per 1000 persons in 1920, to 15.9 per 1000 in 1950, and to 8.8 per 1000 in 1970. Improvement in mortality conditions in the years since the Second World War has largely been due to the control of epidemic and endemic diseases through low-cost public health measures. Cause of death statistics for example show that malaria accounted for 22.2 percent of all deaths in 1947, while in 1970 it accounted for only 1.5 percent. Furthermore, diarrhea and dysentery, the diseases most amenable to public health measures also declined as the main causes of deaths from 13.2 percent of all deaths in 1947 to 2.8 percent in 1970.

Thailand, like most countries in the region has been known for its high level of fertility in the past. Estimates of crude birth rates rose from 45 per 1000 to 50 per thousand between 1920 and 1932, and

thereafter remained at a level of around 47-49 per 1000 until 1955. It was estimated at 40 per 1000 in 1970. (ESCAP, 1976). Although fertility rates presently remain at high levels, evidence of a recent reduction in fertility is being noted, especially since the 1960. Total fertility rate, which was estimated at around 7.0 in 1937, declined to 6.4 in 1960 and to 5.6 in 1970.

Thereafter the total fertility rate was estimated at 5.2 in the 1974-1975 period. (Arnold and Wanglee, 1977).

Proportions married by age for females in the reproductive ages for 1947, 1960 and 1970 reveal a decline in the proportions married below age 30 and an increased at subsequent ages. The singulate mean age at marriage hardly changed at all over the 1947-1970 period: they were from 21.1 in 1947, 21.6 in 1960 and 21.9 in 1970. Since the age at marriage increased very little between 1960 and 1970, the decline in fertility between 1960 and 1970 was therefore principally due to a fall in marital fertility. In fact, total marital fertility fell from 10.1 per woman in 1964-1965 to 8.7 per woman in 1974-1975, representing a 14 percent decline. However the decline occurred mostly among older women ages 30 and over.

Labor Force and Employment. Although not strictly comparable the economically active population (11 years old and over) increased from 6.8 million in 1937 to about 16.9 million in 1970 or close two and

a half times in 33 years. This increase has been due to the increase in the population and to the increase in participation in economic activity resulting from the social and economic development. (ESCAP, 1976).

The labor participation rate increased from 71 percent in 1937 to 80 percent in 1960 and thereafter declined to 75.0 percent in 1970. The participation rate of women in economic activity in particular increased from 68 percent in 1937, to 77 percent in 1960 and 70 percent in 1970. The decline in labor force participation between 1960 and 1970 is attributed to the decline in the proportion of the working age population from 53 percent in 1960 to 49 percent in 1970, and to the increased school enrolment especially in the secondary and higher education levels. (ESCAP, 1976),

Compared to Indonesia and the Philippines, Thailand exhibits relatively high participation rates for females. However, 83 percent of the employed females in 1970 were in agriculture, and a large majority of these were unpaid family workers. In addition to females, the data reveal high child and youth (11-19 years of age) labor force participation in Thailand: 64 percent in 1960 and 63 percent in 1970.

By employment status, 82 percent of the economically active population in 1970 were either own-account workers or unpaid family labor, indicating possibly low productivity employment. The rate was higher for females than for males: 88 to 77 percent respectively. Like

most countries in the region, agricultural employment constitute the bulk of employment. In Thailand 78 percent of economically active population were engage in agricultural activities; a slight reduction from 82 percent in 1960.

Like Indonesia, the unemployment rates in Thailand based on the census and labor force survey data are relatively low; these were 0.6 to 1.3 percent in 1960 and 1970 respectively, or in numerical terms 88,254 persons in 1960 and 226,482 in 1970. Most of these unemployed, about 75 percent, were persons under 25 years of age, living mostly in municipal areas.

The challenge ahead in employment creation will take into account both Thailand's increasing labor force and the existing backlog of underutilized labor. The Fourth Plan projected that the labor force will increase from 18.8 million in 1975 to 21.9 million in 1985 and to 29.5 million by the end of the Third Development Decade. Labor force increases per annum will be 659,600 during the 1975-1985 period and 824,000 between 1985 and 1990.

In addition to unemployment which is suspected to be much higher than those recorded by the censuses and labor force surveys, the Plan estimated that a considerable amount of underemployment prevails in the country especially in the rural areas. Based on rural employment surveys carried out from 1968 to 1972, it was reported that up to 50 percent of the agricultural workforce and up to 21 percent of the non-

agricultural workforce do not work in various months of the year. Hence it is estimated that a minimum of about a million additional jobs have to be created annually to take care of the current backlog of unemployed and underemployed as well as the future annual additions to the labor force.

The percentage of labor force in manufacturing is only 4 percent in Thailand, and any major effort to expand investment in the modern sector will not have substantial impact on the employment of the labor force in the next decade. Hence employment creation will still continue to rely largely on the agricultural sector.

Population Distribution and Rural-Urban Migration. The distribution of the population in Thailand's four major regions remained more or less constant between 1947 and 1970. The Northeast, and the South representing geographically the largest and the smallest regions correspondingly had the largest and smallest population. Furthermore, in terms of rural-urban distribution, Thailand remains largely rural with 87 percent of the population residing in rural areas in 1970. This proportion changed little over the period 1960-1970. The urban population however is heavily concentrated in the Central Region; about 71 percent of total urban population in 1970 is found in this region (ESCAP, 1976). More importantly, more than 90 percent of this urban population in the central region is found in the Bangkok-Thon Buri metropolitan center.

The growth of the Bangkok-Thon Buri metropolitan area has always been of major concern. During the 1947-1960 period, the population of this area is more than doubled, from 781,662 in 1947 to 1.8 million in 1960. Between 1960 to 1970 it further increased to 2.9 million implying an annual rate of growth of close to 5 percent. In 1972 the population of Bangkok Metropolitan of 3.8 million was more than 40 times as large as the second most populous city, Chieng Mai in the North. (National Economic and Social Development Board, et al., 1974). Furtnermore, the 10 largest urban places in Thailand grew at average annual rates of 6 percent in 1947-1960, and 4.3 percent in 1960-1970. Between 1970 and 1972, the total populations in these urban places grew from 3.4 million to 4.4 million, a change of 27 percent. (National Economic and Social Development Board, et al., 1974). Evidence indicate the migration played an important role in the growth of these urban centers, most notable of which is the migration into Bangkok-Thon Buri area.

## 6. Population Policy and Programs In Perspective

At the turn of the 1970s, and for some countries much earlier, official population policy was adopted whose main focus was the reduction of the rapid population growth through fertility control. The main population program was the family planning program aimed at providing contraceptive technology to reduce fertility on a voluntary basis. The rapid declines in fertility in Korea and Singapore and the

more moderate declines in Thailand, Indonesia and the Philippines have been attributed to varying extent to the impact of such program. It is difficult, however to apsess the impact such programs has had on the population growth rate since the countries that have achieved the most rapid decline in fertility were also the countries which underwent rapid economic and social transformation.

Evidence however are available pointing to the success of the program in terms of increasing awareness and knowledge of modern contraception among an increasing proportion of women, first in the urban areas and later in the rural areas. Substantial progress have also been reported in increasing the proportion of acceptors, though less progress have been observed in maintaining high continuation rates.

In spite of these successes, problems still persisted. A review of the family planning efforts of the ASEAN nations, notably Indonesia, Malaysia, Thailand and the Philippines, revealed continuing problems including the limited rural outreach, the lack of manpower and trained personnel, the decline in continuation rates, the gap between knowledge and practice, and the problem of coordination and administration. Various strategies, however, were evolved to cope with these problems, especially with respect to the lack of manpower and limited rural outreach. Malaysia used traditional birth attendants to recruit pill acceptors and to regularly supply these with pills. The Philip-

pines and Thailand trained paramedics, especially midwives to take over some of the functions of clinic doctors such as pill dispensation and IUD insertion. And Indonesia used village contracetive distribution centers manned by acceptors and village leaders to supply contraceptives to acceptors in or near the village. (Report on the Preparatory Technical Consultation for the Meeting of ASEAN Heads of Population Programmes, 1976). In addition, supportive activities were implemented including the introduction of population education into the school curricula and the modification of existing fiscal and welfare incentives and disincentives in line with the family planning objectives. Rural outreach continued to be intensified either through fielding outreach workers as in the case of the Philippines or through encouraging community efforts as in the case of Indonesia.

With the notable exception of Indonesia's transmigration program and Malaysia's FELDA programs aimed among others at influencing population distribution, the population policy and program thrust in the late 1960s and early 1970s was concentrated in fertility reduction mainly through family planning efforts. Governments in the sub-region however have clearly recognized the need for rapid socio-economic transformation as an important factor for the rapid and sustained decline in fertility and growth rates. In addition based on the recognition of the necessity of formulating population policies and programs as integral parts of the social and economic development

strategy, governments in the sub-region have attempted in varying degrees to integrate population into their development plans. Such integration however has yet to be fully implemented. Often integration simply meant the enlistment of different government agencies in achieving the family planning objectives either through education, information or the provision of services.

Part of the failure to fully integrate population into the overall development is the difficulty of such integration at the operational level, which in turn in partly due to the complexity of the interaction between population and socio-economic factors and partly due to the inadequacy of the empirical knowledge base for the assessment of such interrelationships for development planning.

Attempts toward full integration of population in development however have been initiated, at least at the conceptual level, in the development planning of the later part of the 1970s. A brief examination of the development plans in selected countries in the sub-region reveal a trend toward the broadening of population policy to include other demographic variables, as well as toward some explicit recognition of the interrelationships between socio-economic and demographic factors. To illustrate the nature and extent of this evolving integration in development planning, a brief review of the latest development plans of Indonesia, Thailand and the Philippines is made below. Special reference is made to the strategies proposed for influencing

demographic factors, employment and welfare, in relation to the common population-development concerns described earlier.

With respect to demographic factors, Indonesia's long term policies proposed in Repelita II (1974/75-1977/78) include (a) the reduction of the birth rate mainly through family planning and supportive activities implemented in the context of family welfare and voluntary action; (b) the influencing of population distribution between regions through transmigration efforts and regional development in the context of a more optimal exploitation of nature and manpower resources; and (c) the influencing of population distribution between rural and urban areas through development of towns, industrial dispersal, improved transportation and employment creation.

Broad qualitative statements of differing emphases were made regarding the interrelationships between various socio-economic and demographic factors. This include the recognition (a) that mortality reduction especially infant and child mortality could lead to fertility reduction on the belief that in household decisions, with higher mortality a higher birth rate is necessary to have enough surviving children who will contribute to family income; (b) that a structure of incentives through fiscal and other means including old age and social insurance would affect motivation for smaller family size by changing structure of costs and benefits of children; (c) that population education in schools could increase awareness and knowledge regarding

the population problem and the significance of family planning; and (d) that providing of wider opportunities for elementary education especially to women of which half were illiterate in 1971 could have a direct effect for the success of family planning program and the national population policy in general. In addition, regional and village development is believed to encourage migration away from densely populated areas by increasing employment opportunities in the villages and by reducing wage differentials between cities and villages especially if the latter is accompanied by appropriate wage policies.

The expansion of employment opportunities is given top priority and it was considered necessary to integrate employment policy into all development activities due to the close relationship between employment opportunities and other development problems. The employment opportunity policies were not only aimed at creating new employment but also directed to increasing productivity and incomes. A whole range of policies aimed at increasing employment opportunities were proposed, categorized into three components namely: (a) a general policy which includes wage, monetary and fiscal policies aimed at influencing the cost of production to reflect the scarcity of factors of production, market and labor relations, choice of technology to reflect factor endownments, and education and training to rationalize the distribution of skills to manpower requirements; (b) sectoral policies aimed at influencing systems and choices of production that would absorb labor

especially in agriculture and in industry: in agriculture through intensification of labor input especially in food production, extensification through extension of agricultural lands to new territories, and diversification of agriculture; and in industry through choice of output and technology that are directly or indirectly labor-intensive and finally (c) special policies and programs aimed at expanding employment in village areas including such programs as the transmigration program.

In the traditional area of health and welfare, strategies include the improvement of health services especially in the rural areas, the reduction of morbidity and mortality from contagious diseases, and the improvement in nutrition. While these have direct welfare effects, they were also believed to affect fertility through the mechanisms described earlier.

In the Fourth National Plan (1977-1981) of Thailand the main policy to achieve a reduction in population growth was to expand family planning services especially to people living in remote rural areas and to those living in urban squatter settlements. In addition, supportive activities were proposed for implementation or consideration which includes (a) the revision of rules regarding subsidies and allowances for maternal leave and child support granted to civil servants, (b) liberalization of abortion and sterilization laws, (c) limitation of maternal leaves for private employees, and (c) population education in the school curricula.

Measures proposed to obtain a balance between regional and rural-urban populations include the development of regional centers to serve as an economic base for each region and to check migration into the Bangkok metropolitan area. Furthermore, regional and spatial considerations were to be taken explicitly into account in formulating policies and programmes concerning production diversification, income generation, the decentralization of industries and employment to various regions of the country, and the decentralization of basic infrastructures.

With respect to manpower, long term measures to deal with the unemployment problem include population growth reduction, improvement in the education curricula to produce outputs consistent with the requirements of the economy, and rural development through labor intensive agricultural and industrial development. Programs related to food and nutrition, education, and public health, in addition to their direct welfare effect were also viewed as important components in the development of the quality of human resources.

In solving the problem of the inadequacy of basic needs, income inequality, unemployment and underemployment, the heavy pressure of a rapid population growth, and regional growth disparities, the Philippine Plan (1978-1982) proposes a two-pronged strategy of balance growth involving both agricultural and industrial development, and human resource development through the expansion of health, nutrition and housing services, reorienting education system towards the country's

development requirements and the provision of more productive and better income earning opportunities.

A unique feature of the proposed Philippine strategy is its strong regional development orientation. This commitment to regional and rural development is based from four main concerns (a) the alleviation of poverty in the rural areas where the bulk of the poor people are found, (b) the creation of employment opportunities in rural areas to prevent excessive rural to urban migration of underdeveloped and unemployed productive segments of society; (c) the ensuring of minimum food supplies to cover basic requirements of rural people, and (d) the production of export products and import substituting goods to increase the flow of foreign exchange in the rural areas. Specific strategies proposed include (a) integrated area development involving the expansion of agricultural production, of domestic distribution and marketing, and the simultaneous undertaking of related aspects of development like small-and medium-scale industries, infrastructure support and social services; (b) the development of an urban hierarchy which will give particular emphasis on the development of small-and medium-sized cities in the next quarter of the century. The latter is expected not only to help relieve population pressure in the primate cities and other congested urban areas but also to increase and widely spread the modernization spin-off which such urban centers would provide to the surrounding rural areas. Social services, infrastructures and dispersal of industries are major integral parts of this urban development thrust.

Sectoral strategies in health, nutrition and family planning are aimed at (a) increasing the life expectancy (b) reducing the rate of population growth (c) reducing malnutrition of these services especially into the rural areas. Notable in this sector is the lack of prominence given of the role of family planning programs compared to previous plans. This program is subsumed under the overall integrated health, nutrition and family planning sector. The family planning program however is still a major program in the Philippines including its supportive activities such as population education, fiscal and other incentives.

The above overview of the Indonesian, Thai and Philippine strategies for population and development reveal many common elements reflecting the response to their common concerns; general elements that would need to be strengthened in the coming decade. One is the broad strategy of balanced growth and wider distribution of opportunities through sectoral and regional development. The other is the explicit recognition of mutual interaction between social, economic and demographic factors in formulating specific sectoral policies. However such qualitative recognition has yet to give way to quantitative considerations and to the setting up of quantitative sectoral targets which take into account the expected impacts of other sectoral programs. On the other hand, the review also revealed policy gaps whose consideration could add further dimension to the overall strategies and contribute to the further integration of several policy components.

The next section attempts to describe these considerations more fully in the attempt to identify the main elements of the population-development strategy for the 1980s.

## IV. STRATEGIES FOR THE 1980s

This section attempts to identify the population and development strategies for the 1980s based on the overall goals of the governments in the region of promoting rapid economic development and a more equitable economic and social order. Particular attention will be made to those strategies that would deal directly with the common problems in the majority of the countries of the sub-region that are perceived to constrain the attainment of their overall goals. These problems are (a) the rapid population growth, in the rural areas from natural increase, and in the urban areas, from natural increase and rural-urban migration; and (b) the provision of productive employment and income which is a basic requirement for meeting the basic needs of the population.

An Overall Strategy. Given the goals and the common problems of the countries in the sub-region, one would like to see in the 1980s a greater intensification of development efforts based on an overall strategy whose many important features have already been laid out in the late 1970s. This overall development strategy is one of balanced

growth which emphasizes modernization of agriculture, regional and rural development, and improved income distribution, productive employment and social development. The major components of this overall strategy includes among others policies and programs aimed at influencing demographic factors, employment and welfare. Population policies include the reduction of rapid population growth through fertility control, and the rationalization of population distribution and rural-urban migration through regional and the rural development. Employment policies on the demand side include the development of labor-intensive agriculture and industries through appropriate sets of wage, fiscal and monetary policies, and on the supply side the reduction of population growth and the reorientation of education and training programs consistent with development requirements. Finally welfare policies include the improvement and wider provision of health, nutrition, education services, especially in the rural areas and among the lower income sub-groups of the population.

Properly directed intensification of development efforts in the 1980s however require some redesigning of the different policy components in order to achieve greater integration among these components, as well as some changes in emphasis in the choice and implementation of various measures. Both these requirements are aimed to increase the impact of the strategies in the attainment of development goals.

Integration of Population in Development Planning. Progress in the operational implementation of integration of population in

in development planning should become a serious concern for governments in the 1980s. Sound integration of population in the development strategy must be based on the explicit recognition of the interrelations of social and economic factors with demographic factors. As an initial step in the operationalization of this integration, population policy should be broadened from merely one that influences fertility to one that would influence the other critical demographic variables of nuptiality, fertility, mortality, migration and population distribution. In addition, population policy should be linked directly to a manpower policy that influences the rate of labor force participation, labor quality, and the composition of skills, and a welfare policy that influences among others health, nutrition, and educational services. Manpower and welfare policies are often implemented with the view of responding to the effects of population growth; seldom are they explicitly implemented to affect demographic factors in turn. Theoretical and empirical knowledge allow us to view the expected interrelationships between these components, as described below (Figure 1). Emphasis is given to those relationships which have significant policy potentials for demographic and socio-economic development. Although the distinction between policy components is arbitrary, it should serve as a useful starting framework for analyzing policy interrelationships.

The well known and recognized pattern of relationships found in development plans is the effect of demographic factors on manpower and welfare programs. At the national level a rapid rate of population

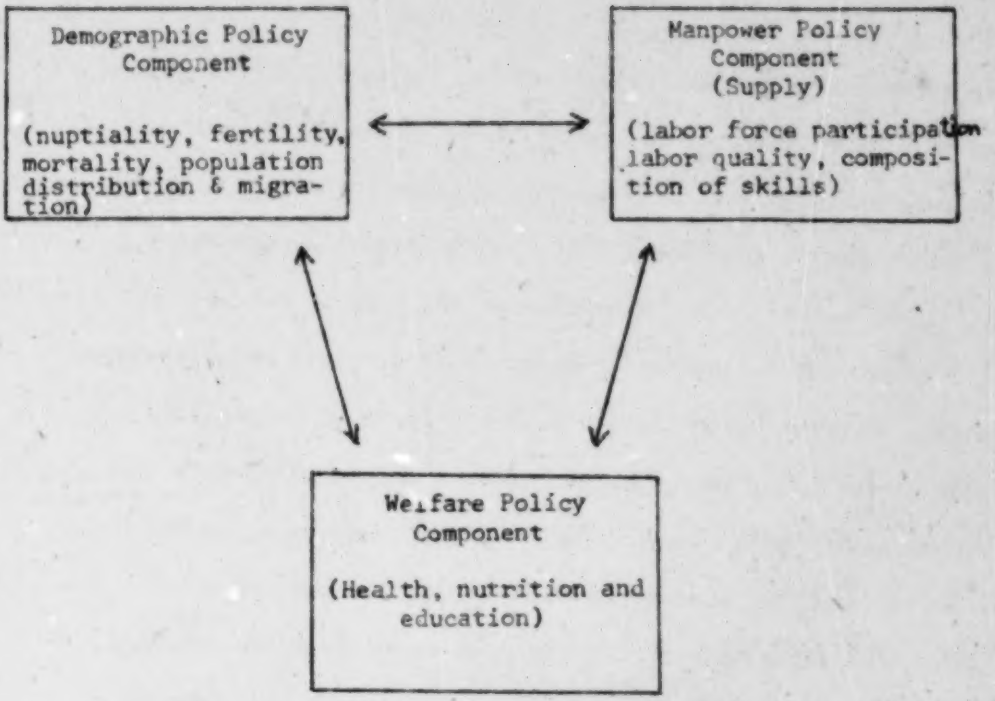
Demographic Policy Component
(nuptiality, fertility, mortality, population distribution & migration)
Manpower Policy Component (Supply)
(labor force participation labor quality, composition of skills)
Welfare Policy Component
(Health, nutrition and education)

Figure 1

Interrelationships Between Selected Policy Components Of An Overall Development Strategy

growth arising from lowered mortality and continuing high fertility rates leads to greater pressure on the provision of basic welfare services such as health, education, housing etc. on the one hand, and to greater pressure for the creation of employment opportunities for the rapidly growing labor force, on the other. At the sub-national, the effect of rapid migration in few urban centers further exacerbates such problems in these centers. On of the basis of these relationships manpower and welfare policies in the past tended to be more population-responsive rather than also population influencing .

Nevertheless additional relationships are possible both within and between the policy components. Among the more well known and significant relationships within components include the effect of age at marriage on fertility on the one hand and the mutually supporting effects of health, nutrition and education on the other. Between components however, the following illustrates the possible relationships. Family planning programs which provide better spacing of births, and which reduces births among the young and older women, could result in better maternal health among women. On the other hand, improvements in health and nutrition below some thresholds could have significant effect on potential capacity for child-bearing among women by reducing biological constraints to fecundity. Unless adequate family planning services are made available, fertility will tend to increase.

Furthermore, improvements in education could lead to higher ages at marriage among women, hence affecting fertility. It could also affect labor participation rates of the young people of both sexes, thus reducing labor supply. In addition, labor quality is increased leading to higher labor productivity in the future. On the other hand, participation of women in the labor force could affect both nuptiality on one hand, and fertility within marriage on the other. Increased participation of women in economic activities could put additional pressure on employment creation programs.

Welfare policies aimed at alleviating urban situation could have adverse consequences in terms of further rural-urban migration

and resulting aggravation of employment and social services problem in the urban areas, unless an equally vigorous program of rural development are pursued.

The above and other mechanisms illustrate the complexity of the social, economic and demographic interrelationships. At the same time it illustrates the need as well as the potentials for integrated development planning. Taking explicit account of such interrelationships in development planning implies the need to broaden previously narrow sector-specific objectives to include additional objectives suggested by the analysis of their interrelationships. Hence for example, the family planning with its fertility reduction objective should be broadened to include maternal and child health and general family welfare as additional objectives. Likewise education with its social and welfare objectives should be broadened to include both demographic objectives (e.g., influencing age at marriage), and manpower objectives (e.g., influencing labor force participation). Thus greater integration of the various policies increases their individual and collective contribution to the attainment of the overall development goals.

Policy Considerations For the 1980s. The review of current development plans in selected countries suggests the need for additional policies to achieve demographic as well as manpower objectives within the context of the overall development goals. With reference to the

framework described above, these include policies to influence the age at marriage and family formation and the other to influence labor force participation on activity rates especially among the young of both sexes, and of women in general.

Age at marriage is known to have a significant impact on fertility, and therefore indirectly on long term population growth. However, no explicit policy has been adopted to influence this important demographic variable. The implicit assumption seems to be that exogenous changes in education and urbanization, and the general economic development will eventually result in the desired nuptiality patterns. Nevertheless, just like fertility, its time path can be affected in such a way that it could contribute significantly to the achievement of long term demographic and development goals. The high fertility in the 1960s will now be translated into large proportion of young population of marriageable ages in the 1980s. Further deceleration of population growth in the coming decades would depend not only in fertility control within marriage but also in the delaying of family formation. Thus one could arrest the momentum of growth inherent in the expected age structure of the 1980s.

Measures to affect the age at marriage must be based on the same principles on which fertility reduction is based in many of the countries of the sub-region, namely on the basis of voluntary, non-coercive action. While this limits the range of possible measures,

the potentials for indirect approaches should be explored. These approaches would invariably include broadening educational opportunities to keep more young adults longer in school. In addition, informational campaign tied to both educational and family planning programs could be made to encourage delayed marriage. On the other hand, legal measures of increasing the minimum age at marriage most likely could not be reasonably enforced to have appreciable impact on marriage patterns.

The main policy to reduce the pressure on labor supply is the reduction of population growth through fertility reduction. This policy however is considered as long run since its effect on labor force size and growth would be lagged for at least 15 years. The supply of labor however, as conventionally defined, is a function of both population of working age and activity rates. While population control affects the first determinant, socio-economic factors can affect the second. Hence explicit policy and measures influencing labor force participation rates should be considered in developing the manpower strategy for the 1980s.

Several aspects of this may be considered. One is the labor force participation of the young population 10-24 of both sexes. Educational programs which tend to raise school participation rates within these ages could have substantial impact on labor participation rates not to mention on future labor quality, thereby reducing pressure on employment creation. A reallocation of investments towards widening

educational opportunities and improving educational facilities and instruction, as well as towards creation of more productive and higher earning jobs should be considered.. However the relationship between labor force participation rates and school participation rates is a function, among others, of income. Hence measures to increase household income through productive employment of the parents would have to go hand in hand with educational development. The mutually reinforcing nature of these relationships preclude the independent pursuit of sectoral policy objectives.

The increasing concern for female labor force participation has often been viewed in terms of welfare (e.g., improved status) and demographic (e.g., lower fertility) objectives. It's manpower implications on the other hand did not seem to have been given sufficient attention thus far especially in view of the unemployment and underemployment problem in many of the countries in the sub-region. Attempts to increase labor force participation of women could tend to put additional pressure on the employment creation abilities of the economy to employ those displaced by women. On the other hand, increased participation of women in productive employment could mean higher income which in turn could affect the activity rates of children and of the elderly. Thus given the population of working ages the effect may be more on the age pattern of activity rates than on the overall labor supply. Thus in addition to welfare and demographic objectives a manpower objective of

changing the structure of activity rates may be added to policies that tends to increase female labor force participation. These policies would probably include elimination of job discrimination by sex, provision of greater education and manpower training opportunities for women, and the general policies affecting employment generation especially in the rural areas. In addition the fertility control policy through family planning could increase female participation by freeing the women from child care.

The existing policy in the sub-region concerning population distribution and rural-urban migration involves essentially the planned regional and rural development and the development of an urban hierarchy both broadly conceived to include infrastructures, social services and employment. This indirect measure of affecting regional and rural-urban population growth and distribution needs to be further strengthened in the 1980s as it directly bear upon the overall strategy of providing employment and of spreading the benefits of development more widely among the less developed areas of the country.

With respect to the fertility reduction policy in the sub-region, there is a need to maintain greater emphasis on family planning information, education and provision of services relative to the supportive measures that have been tried or proposed. The latter include changes in the tax laws to eliminate tax exemption on higher parity children, limitation of maternity leaves to the first few deliveries,

introduction of social or old age insurance and others. Although these fiscal and other measures have proved quite important in the fertility reduction policy of Singapore, it is doubtful whether such measures would have appreciable impact on fertility motivation in such countries as Indonesia, Thailand or the Philippines. Furthermore messures involving disincentives may tend to have adverse welfare effects. Thus rather than supporting the family planning program, these measures may simply distract attention to the more pressing need for providing information and services in the 1980s. Such increased role for family planning services arises not only from the need to broaden family planning objective to include family welfare in addition to fertility reduction, but also from the increased effective demand for such services im the 1980s. Such increased demand is expected to arise from the changed fertility motivations associated with the increased economic and social opportunities resulting from rural development. In addition, family planning programs have yet to reach existing demand especially in the rural areas.

In view of this increased demand for services and the limited resources of such programs, consideration may be given to increasingly shift the distribution of contraceptives through the commercial outlets especially in the large urban areas, while program efforts are concentrated in rural areas.

In spite of the success of almost all countries in the sub-

region to drastically reduce mortality after the Second World War, and maintaining overall mortality at relatively low levels, increased efforts are still necessary to reduce mortality even further in the 1980s, especially infant and child mortality. Potentials for reducing overall infant mortality are high in most of the countries in the sub-region especially Indonesia. Behind the aggregate indicators of mortality lie great differentials among sub-groups of the population. Reduction of mortality differentials therefore should be a continuing strategy in the 1980s consistent with welfare and overall development goals.

Data Collection and Research. Failure to account for the socio-economic demographic interrelationships in development planning is due not only to the complexity of their interaction, but also to the lack of adequate empirical and statistical base from which to view and measure these relationships in country-specific situations. The improvement of the statistical base is therefore a crucial aspect of the population-development strategy of the 1980s.

Collection of basic data or a regular basis and of reasonable quality are needed both for a better understanding population-development problems as well as for the formulation of adequate strategies for dealing with these problems. Demographic data collected from censuses should be supplemented with data from an improved vital registration system and with sample surveys on a regular basis which will provide

comparable indicators to determine trends. In addition more disaggregated types of analysis of differentials would be necessary in order to identify target groups and areas requiring more intensive attention in line with the welfare orientation of the development strategy. New sets of impact and progress indicators bearing on specific areas of development concern will need to be developed in order to measure achievements and to provide quantitative targets. The setting up of quantitative targets for many of the demographic, social and economic objectives in development plans glaringly lacking in the past strategies in turn would allow for the proper assessment of the population and development implications of various policy measures.

Manpower data are sufficiently lacking in many of these countries of the type required for the proper assessment of manpower problems. Very little is known for example of the seasonality of employment, levels of utilization and income generation especially in the rural areas, and of their differentials between regions and subgroups of population. Aggregate data on unemployment and conventional measures of underemployment mask the real employment problems in many countries in the sub-region. Hence development of new measures as well as regular collection and analysis of data should become high priority in the 1980s.

Cooperative efforts in data collection, indicators development and statistical model building among countries in the sub-region

especially as it relates to the requirements of development planning should be encouraged and existing efforts currently being undertaken by the group of ASEAN countries should continue to be supported, expanded and intensified.

## V. CONCLUSION

In spite of the differences in culture and socio-economic development among the countries in the sub-region comprising of the ASEAN countries, Hongkong and South Korea, one finds a set of common concerns of major importance arising from their demographic development in the past decades. These concerns include (a) the increased pressure on the attainment of development objectives specifically in the provision of basic services such as health, education, nutrition and others arising from continued rapid population growth; (b) the increased pressure on the creation of productive employment opportunities arising from the rapid growth of the labor force; and (c) the increased pressure on the provision of adequate social services and employment arising from the rapid migration into urban centers, especially in the primate cities.

Although the past strategies were mainly focused on population growth reduction through fertility control, many of the countries in the sub-region have began to develop broader population policies to deal with other demographic-related problems such as the imbalanced

population distribution and the rapid rural-urban migration. In addition, the shift in development strategy in the 1970s from the emphasis on rapid growth to the more equitable distribution of the fruits of development led to the formulation of specific policy measures emphasizing modernization of agriculture, regional and rural development, wider provision of employment opportunities and greater access of social and welfare services especially in the rural areas where the bulk of the population is found.

While this overall development strategy as developed in the latter part of the decade contained many elements that needed to be strengthened in the 1980s, several directions must be considered and taken into account in order to enhance the effectiveness of this strategy in achieving the development goals of the 1980s. One such direction is the need for greater integration of the different policy components in the overall strategy. Specifically this involves the integration of the demographic, manpower and welfare policy components by explicitly taking into account the interrelationships within and between such components. Introduction of quantitative targets would further enhance such integration at the operational level.

In addition opportunities exist for broadening policy components to include influencing strategic variables that could have substantial impact in achieving sectoral objectives. One of this is a policy to influence the age at marriage, while the other is a policy to influence age-sex activity rates.

Furthermore, there is a need to redirect emphasis on the importance of various programs to meet policy objectives. In this regard, family planning programs will need even greater emphasis in the 1980s than would some of the supportive measures that have been implemented or proposed to encourage fertility reduction (e.g., fiscal incentives). Greater emphasis should likewise be place on programs to reduce mortality and morbidity, by reducing the still high infant and child mortality in some major countries and by reducing mortality differentials in these countries.

Finally, strong support should be given to the regular and timely collection and analysis of basic demographic and economic data needed for assessing problems as well as in formulating policies and programs in the 1980s and beyond.

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